FILE NOTATIONS

Entered in N I D File .....
Entered On S R Sheet .....
Location Map Pinned .....
Card Indexed ✓
I W R Application for Fee Land .....

Checked by Chief .....
Copy N I D to Field Office .....
Approval Letter .....
Disapproval Letter .....

COMPLETION DATA:

Date Well Completed 8-23-35
OW..... WW..... TA.....
GW..... OS..... PA ✓

Location Inspected .....
Bond released
State of Fee Land .....

LOGS FILED

Driller's Log —
Electric Logs (No.) —
E..... I..... E-I..... GR..... GR-N..... Micro.....
Lat..... Mi-L..... Sonic..... Others.....

Utah Southern Oil

Balsley #1

Core Drilling Report.

Started coring Drilling at 946.

Date	FROM	TO
March 18TH	946	948
	948	950
	950	952
March 19TH	952	957
	957	961
	961	965
	965	970
	970	975
	975	979
March 20TH	979	984
	984	988
	988	993
	993	998
	998	1003
March 21ST.	1003	1007
	1007	1012
	1012	1018
	1018	1023½
	1023½	1029½
	1029½	1034½
	1034½	1039½
	1039½	1044½
	1044½	1049½
	1049½	1054½
	1054½	1060
	1060	1065
	1065	1070½
	1070½	1076
March 22nd	1076	1081½
	1081½	1087½
	1087½	1092½
	1092½	1097½
	1097½	1103
	1103	1108
	1108	1113
	1113	1119
	1119	1124
	1124	1129
	1129	1134
	1134	1139½
	1139½	1144½

Date	FROM	TO
March 23	1144½	1150½
	1150½	1155½
	1155½	1160½
	1160½	1165½
	1165½	1171
	1171	1176
Q' RECOVERED →	1176	1182
	1182	1186½
	1186½	1192
	1192	1193½
	1193½	1199
Mar. 24TH	1199	1205
	1205	1211
	1211	1216
	1216	1222
	1222	1224
	1224	1230
	1230	1235½
	1235½	1240½
	1240½	1246
	1246	1251
	1251	1257
	1257	1262
March 25TH	1262	1267
	1267	1273
	1273	1278½
	1278½	1283½
	1283½	1289½
	1295	1300
	1300	1305½
	1305½	1311
	1311	1316
	1316	1322
	1322	1327½
	1327½	1333
March 26th	1333	1338
	1338	1344
	1344	1349½
	1349½	1355
	1355	1361½
	1361½	1368
	1368	1372½

Date.		
	1372½	1378
	1378	1383½
	1383½	1389
	1389	1397
	1397	1404½
March 27	1404½	1409½
	1409½	1415½
	1415½	1421
	1421	1427
	1427	1431
Q' RECOVERED →	1431	1436
	1436	1442
	1440	1448
	1448½	1455½
	1455½	1462½
	1462½	1468½
	1468½	1475
March 28	1475	1479
	1479	1485
	1485	1491½
	1491½	1497
	1497½	1504
	1504½	1511½
	1511½	1516½
	1516½	1524
	1524	1531
	1531	1538
	1538	1543

Core recovered will average better than 90%.

A. P. Voorhies.
Floyd Baker

UTAH SOUTHERN OIL COMPANY

Log of Balsley Well Number 1
Salt Valley, Grand County, Utah

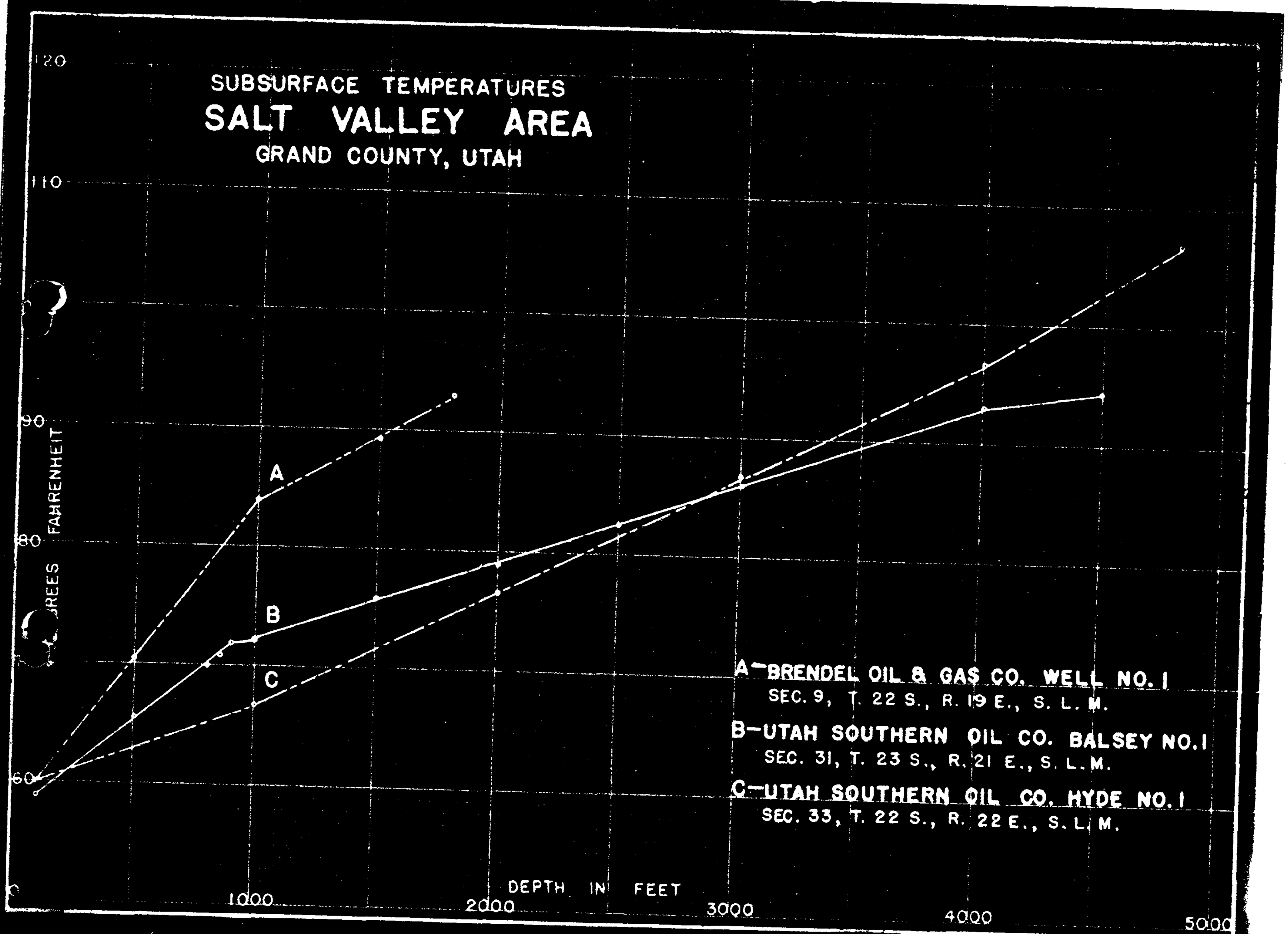
Location: NE¼, Sec. 30,
Twp. 23, Range 21 E.

Spudded: December 18, 1930.

12	20	Sand and Gypsum.
20	50	Shale and Gypsum.
50	95	Gypsum.
95	120	Black Shale.
120	200	Blue Shale and Gypsum.
200	225	Gray Shale and Gypsum.
225	370	Blue Shale.
370	380	Black Shale.
380	420	Blue Shale with streaks of Black Shale and Anhydrite.
420	430	Gray Shale.
430	480	Blue Shale and Gypsum.
480	520	Blue Shale and Gypsum. Very Sticky.
520	720	Blue Shale and Gypsum.
720	760	Muddy Blue Shale.
760	840	Blue Shale.
840	850	Black Shale with Water.
850	865	Shale.
865	883	Shale and Anhydrite.
883	884	Salt.
884	907	Salt and Shale.
907	920	Gray Shale and Salt.
920	946	Coring. Salt.
946	1124	Salt.
1124	1193	Salt with small amounts of black shale.
1193	1262	Salt. Core from 1257 to 1262 showed 2% potash.
1262	1580	Salt.
1580	1584	Salt and Anhydrite and Shale.
1584	1598	Anhydrite.
1598	1609	Anhydrite.
1609	1620	Anhydrite and shale.
1620	1626	(corrected measured hole)
1626	1654	Shale and Anhydrite.
1654	1680	Black Shale.
1680	1684	Black Shale.
1684	1720	Gray Sandy Shale and Lime.
1720	1723	Run core bbl. Gray Sandy Limy shale with a few small deposits of salt.
1723	1735	Gray Sandy Limy Shale.
1735	1748	Black Shale.
1748	1754	Gray Sandy Shale.
1754	1758	Black Shale.
1758	1763	Gray Sandy Limy Shale.
1763	1768	Gray Sandy Shale.
1768	1801	Soft Gray Shale.

1801	1806	Run core bbl. Sandy shale and shale.
1806	1821	Gray Sandy Shale.
1821	1829	Gray Shale and salt.
1829	1872	Salt.
1872	1880	Salt. Run core bbl.
1880	1945	Salt. Run core bbl. from 1880 to 1885.
1945	2152	Salt.
2152	2155	Run core bbl. - salt.
2155	2408	Salt.
2408	2412	Anhydrite.
2410	2435	Black Shale.
2435	2695	Salt.
2695	2703	Black Shale.
2703	2968	Salt.
2968	2984	Anhydrite and Hard gray shale.
2984	3020	Salt.
3020	3025	Anhydrite and shale.
3025	3050	Streaks of salt and shale.
3050	3075	Streaks of salt, shale, and anhydrite.
3075	3100	Salt.
3100	3129	Salt and Shale.
3129	3321	Salt.
3321	3329	Anhydrite and Shale and salt.
3329	3349	Salt.
3349	3358	Gray shale.
3358	3387	Black and Gray shale.
3387	3390	Black and Gray shale. With oil.
3390	3399	Conglomerate and black shale. Run core bbl.
3399	3410	Conglomerate and Black Shale.
3410	3415	Black sandy lime and shale. Oil and gas showing.
3415	3432	Black sandy lime and shale.
3432	3436	Black sandy lime and shale.
3436	3445	Sandy Lime. Hard.
3445	3490	Lime and Calcite.
3490	3500	Lime and Calcite. Also showed a little salt. Think cavings.
3500	3818	Salt.
3818	3930	Shale and Anhydrite.
3930	3937	Salt.
3937	3952	Shale and Anhydrite.
3952	4563	Salt.
4563	4590	Gray Shale.
4590	4672	Salt and Shale.
4672	4703	Black Shale.
4703	4705	Salt. Run core bbl. Formation is lying flat. No dip.
4705	4735	Salt and Shale.
4735	4785	Salt.
4785	4916	Salt with a little shale.
4916	4930	Gray and Black Shale.
4930	4950	Shale with a little salt.
4950	4960	Gray Shale.
4960	4972	Talc.
4972	4996	Black Shale.
4996	5065	Salt and Shale.
5065	5320	Salt.
5320	5369	Salt and Shale.
5369	5380	Gray Sandy Salt.

5380	5400	Anhydrite.
5400	5405	Black Shale and Anhydrite.
5405	5408	Gray Shale and Anhydrite.
5408	5427	Shale and Anhydrite.
5427	5428	Run core bbl. Anhydrite.
5428	5450	Shale and Anhydrite.
5450	5485	Black Shale.
5485	5489	Black limey Shale.
5489	5497	Lime of some kind. Hard.
5497	5503	Lime.
5503	5507	Lime with small showing of salt.
5507	5510	Lime.
5510	5520	Lime.
5520	5525	Lime or Anhydrite.
5525	5530	Lime. Very hard. Black.
5530	5534	Black shale.
5534	5538	Lime. Very hard. Black.
5538	5542	Lime. Black.
5542	5547	Black Shale.
5547	5551	Black Lime.
5551	5567	Black Lime.
5567	5604	Gray Sandy Shale.
5604	5625	Mixed black and gray sandy shale.
5625	5630	Light Gray Lime and Shale.
5630	5636	Dark Gray Lime and Shale.
5636	5646	Gray Limey Shale.
5646	5654	Black Limey Shale.
5654	5659	Gray Limey Shale.
5659	5670	Salt with Gray Shale.
5670	5794	Salt.
5794	5841	Salt with little shale.
5841	6015	Salt.
6015	6023	Salt with a little black shale.
6023	6058	Salt, Black muck and sulphur.



Grand County Refer to Ut. So. Oil-Well No. Hyde 1 File for further information on this plat.

(COPY)

Utah Southern Oil Co. Well No. 1 (Bailey), C NE¼NW¼ Sec. 32. T. 23S., R. 21 E. (575 ft. from N. line and 860 ft. from W. line of Sec.) Salt Valley Field, Grand County, Utah. State Land.

Drilling commenced December 18, 1930, finished October 27, 1932.

From	To	Formation
1	12	Cellar
12	20	Sand and gypsum
20	50	Shale and gypsum
50	95	Gypsum. Set 15½" casing at 76'. Cemented.
95	120	Black shale
120	200	Blue shale and gypsum
200	225	Grey shale and gypsum
225	370	Blue shale
370	420	Blue shale with streaks of black shale and anhydrite
420	430	Grey Shale
430	480	Blue shale and gypsum
480	520	Black ale and gypsum. Very sticky
520	720	Blue shale and gypsum
720	760	Muddy blue shale
760	840	Blue shale - caving some
840	850	Black shale and anhydrite with water
850	865	Shale - hole caving badly
865	883	Hard shale and shell at 869'. 10" casing set at 869' and 290' heavy mud dumped in hole and dia. cord behind casing. Later cemented with 50 sacks of cement.
883	884	Salt
884	907	Salt and shale
907	920	Grey shale and salt
920	1124	Salt. Caving
1124	1193	Salt with small amount of black shale
1193	1580	Salt
1580	1584	Salt, anhydrite and shale
1584	1608	Anhydrite
1608	1650	Shale and anhydrite
1650	1684	Black shale
1684	1720	Grey sandy shale and lime
1720	1735	Grey sandy limey shale
1735	1748	Black shale
1748	1754	Grey sandy shale
1754	1758	Black shale
1758	1763	Grey sandy limey shale
1763	1768	Grey sandy shale
1768	1801	Soft grey shale
1801	1806	Sandy shale. Core
1806	1821	Grey sandy shale
1821	1829	Grey shale and salt
1829	2408	Salt
2408	2412	Anhydrite

From	To	Formation
2412	2435	Black Shale
2435	2695	Salt
2695	2703	Black Shale
2703	2968	Salt
2968	2984	Anhydrite and hard grey shale
2984	3020	Salt
3020	3025	Anhydrite and shale
3025	3075	Streaks of salt, shale and anhydrite
3075	3100	Salt
3100	3129	Salt and shale
3129	3321	Salt
3321	3329	Salt and shale
3329	3349	Salt
3349	3358	Grey shale
3358	3387	Black and grey shale. Caving
3387	3390	Black and grey shale, with oil
3390	3399	Conglomerate and black shale. Ran core barrel
3399	3410	Conglomerate and black shale
3410	3432	Black sandy lime and shale. OIL & GAS SHOWING
3432	3436	Black sandy lime and shale. OIL & GAS SHOWING
3436	3445	Sandy lime - hard
3445	3500	Lime and salt ss. 8¼" casing set at 3452'
3500	3818	Salt
3818	3930	Shale and anhydrite
3930	3937	Salt
3937	3952	Shale and anhydrite
3952	4563	Salt
4563	4590	Grey Shale
4590	4596	Salt
4596	4672	Salt and shale
4672	4703	Black shale
4703	4705	Salt. Took core - formation is lying flat
4705	4735	Salt and shale
4735	4785	Salt
4785	4916	Salt with a little shale
4916	4930	Grey and black shale
4930	4950	Shale with a little salt
4950	4960	Grey shale
4960	4972	Talc
4972	4996	Black shale
4996	5065	Salt and shale
5065	5320	Salt
5320	5367	Salt and shale
5367	5380	Grey sandy salt
5380	5400	Anhydrite
5400	5450	Shale and anhydrite
5450	5489	Black limey shale
5489	5503	Lime - hard
5503	5507	Lime with small showing of salt
5507	5530	Lime - very hard and black
5530	5534	Black shale

From	To	Formation
5534	5542	Lime - hard and black
5542	5547	Black shale
5547	5567	Black lime
5567	5604	Gray sandy shale
5604	5625	Mixed black and gray sandy shale
5625	5630	Light gray lime and shale
5630	5636	Dark gray lime and shale
5636	5646	Gray limey shale
5646	5654	Black limey shale
5654	5659	Gray limey shale
5659	5670	Salt with gray shale
5670	5794	Salt
5794	5841	Salt with a little shale
5841	5890	Salt. Caving badly - had to cement
5890	5940	Salt. Casing. Cemented again at 5940
5940	6023	Salt with a little black shale
6023	6058	Salt - black muck or shale
6058	6059	Salt
6059	6065	Salt and black muddy shale or bentonite
6065	6091	Black muddy shale and salt. Formation has squeezing tendency.
6091	6120	Salt with some black shale

Well plugged and abandoned - August 1935

300' of 10" casing pulled
2285' of 8¼" casing recovered.

From: Pat O'Dell <Pat_O[redacted]ell@nps.gov>
To: NRDOMAIN.NROGM(BR[redacted]EGER)
Date: 7/30/98 2:04pm
Subject: Abandoned Oil/Gas Wells in Arches Nat'l Park

Dear Mr. Krueger:

I pulled your name from the Utah Division of Oil, Gas, and Mining web site. I am hoping you can lead me to the right source of information. I want to get copies of plugging records for two wells that were drilled on state tracts inside the present day boundary of Arches National Park. The information is needed to determine if any potential liabilities remain with the wells. They are on lands that are part of the ongoing federal-state land exchanges. Our site visits did not produce much concern and now we are just trying to close the paper loop.

The 2 wells are located in Sec. 2, 23S, 20E and Sec. 32, 23S, 21E.

Your assistance would be greatly appreciated if just a reply telling me who I need to contact. Thanks in advance.

Pat O'Dell
Petroleum Engineer
National Park Service
Geological Resource Division
Lakewood, CO
(303) 969-2013

CC: Jim Sharum <Jim_Sharum@nps.gov>

From: Bob Krueger
To: MNET.MAIL("Pat_O'Dell@nps.gov")
Date: 8/3/98 3:33pm
Subject: Abandoned Oil/Gas Wells in Arches Nat'l Park -Reply

I have located the files for the two wells you referred to. They are very old wells, circa 1930 and 1948, predating any active regulatory program as far as I can tell. Both files indicate some casing was left in the holes and that the wells were P&A'ed, but did not indicate specifically the procedures followed. No flowing oil/water/or gas was reported on the drilling reports for either well. API #'s are:

1) 43-019-11405, Utah Southern Oil Co., Balsey 1, 1930, Status P&A
2) 43-019-11566, Pure (Union) Oil Co., State No. 1, 1948, " "

I would say these wells pose little or no "liability" to the NPS. You may want to look at them to be sure.

CC: MNET.MAIL("Jim_Sharum@nps.gov"),

From: Pat O'Dell <Pat_O'Dell@nps.gov>
To: Bob Krueger <nrogm.bkrueger@state.ut.us>
Date: 8/14/98 1:55pm
Subject: Re:Abandoned Oil/Gas Wells in Arches Nat'l Park -Reply

Mr. Krueger,

Thank you for the timely information on the two wells in Arches. I don't have a need for copies of the well files at this time.

Once again, thanks for your help.

Pat O'Dell

_____Reply Separator_____
Subject: Abandoned Oil/Gas Wells in Arches Nat'l Park -Reply
Author: Bob Krueger <nrogm.bkrueger@state.ut.us>
Date: 8/3/98 3:33 PM

** High Priority **

I have located the files for the two wells you referred to. They are very old wells, circa 1930 and 1948, predating any active regulatory program as far as I can tell. Both files indicate some casing was left in the holes and that the wells were P&A'ed, but did not indicate specifically the procedures followed. No flowing oil/water/or gas was reported on the drilling reports for either well. API #'s are:

1) 43-019-11405, Utah Southern Oil Co., Balsey 1, 1930, Status P&A
2) 43-019-11566, Pure (Union) Oil Co., State No. 1, 1948, " "

I would say these wells pose little or no "liability" to the NPS. You may want to look at them to be sure.

Received: from state.ut.us (168.180.96.41) by ccmail.itd.nps.gov with SMTP
(IMA Internet Exchange 2.12 Enterprise) id 000AECA4; Mon, 3 Aug 98 17:36:12 -0400
Received: from STATE-DOMAIN-Message_Server by state.ut.us
with Novell_GroupWise; Mon, 03 Aug 1998 15:34:01 -0600
Message-Id: <s5c5d869.080@state.ut.us>
X-Mailer: Novell GroupWise 4.1
Date: Mon, 03 Aug 1998 15:33:44 -0600
From: Bob Krueger <nrogm.bkrueger@state.ut.us>
To: Pat_O'Dell@nps.gov
Cc: Jim_Sharum@nps.gov
Subject: Abandoned Oil/Gas Wells in Arches Nat'l Park -Reply
Mime-Version: 1.0
Content-Type: text/plain
Content-Disposition: inline

CC: Jim Sharum <Jim_Sharum@nps.gov>